

PTITSYN, O.B.; ~~FEDOROV, B.A.~~

Small-angle X-ray scattering study of the structure of molecules
of native RNA. TSitologiya 5 no.3:352-353 My-Je '63.

(MIRA 17:5)

1. Laboratoriya struktury polimerov Instituta vysokomolekulyarnykh
soyedineniy AN SSSR, Leningrad i kafedra fiziki polimerov Lenin-
gradskogo universiteta.

FEDOROV, B.A.; PTITSYN, O.B.

Determination of the transverse sizes of macromolecules by means of X rays scattered at small angles. Dokl. AN SSSR 153 no.4:882-885 D '63. (MIRA 17:1)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova i Institut vysokomolekulyarnykh soyedineniy AN SSSR. Predstavleno akademikom V.A. Karginym.

PTITSYN, O.B.; FEDOROV, E.A.

Determination of flexibility of DNA molecules with the aid of
light disseminated at large angles. Biofizika 8 no.6:659-663
'63. (MIRA 17:7)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR, Leningrad.

FEDOROV, B.A.,; SHCHEDROVITSKIY, S.S.

**Effect of the number of readings of weight scales on the weighing results. Izv. tekhn. no. 2:32-37 Mr-Apr '55.
(MLRA 8:9)**

**1. Sverdlovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta metrologii (for Fedorov). 2. MGIMIP (for Shchedrovitskiy)
(Scales (Weighing instruments))**

FEDOROV, Boris Aleksandrovich; LEVITAN, I.M., red. izd-va;
PAVLOVSKIY, A.A., tekhn. red.

[Finland economy and foreign trade]Finliandiia; ekonomika i
vneshniaia torgovlia. Moskva, Vneshtorgizdat, 1962. 177 p.
(MIRA 15:8)

(Finland--Economic conditions)

(Finland--Commerce)

FEDOROV, B. A.

"The Planning of the Introduction of Remote Control in Power Systems and the Requirements Posed by the Remote Control Apparatus" from the book Remote Control of Power Systems, published by the AS USSR, 1954.

FEDOROV, B.A.

Theory of X-ray scattering at small angles by DNA molecules in a solution. Biofizika 10 no.1:7-10 '65. (MIRA 18:5)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta imeni Zhdanova.

FEDCROV, B.A.

Theory of X-ray scattering by branched macromolecules in solution
with a single point of branching. Vest. IGU 20 no.10:29-33 '65.

(MIRA 18:7)

FEDOROV, B.A.

Spermatogenesis in irradiated rats following preventive introduction of β -mercaptoethylamine. Med. rad. 10 no. 12: 42-43 D '65 (MIRA 19:1)

1. Laboratoriya radiologii Instituta eksperimental'noy patologii i terapii AMN SSSR.

FEDOROV, B. D.

"On the Possibility of Using a Free Gyroscope in the Layout of Underground Pits. Thesis for degree of Cand Technical Sci Sub 26 Oct 50, Moscow Mining Inst imeni I. V. Stalin

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

FEBRUARY, B. D.

"A Possibility of Using a Free Gyroscope for Orientation of Subterranean Mining,"
Nauch. tr. Mosk. Gor. In-ta, No 11, 1953, pp 74-87.

A reiterating theodolite is fixed to the gyroscope in such a way as to align the gyroscope bearings and rotational axis of the theodolite limb on one vertical. A special device allows orientation of the theodolite with respect to the gyroscope axis. (RZhAstr, No 8, 1955) SO: Sua. No. 713, 9 Nov 55.

FEDOROV, B. D., kandidat tekhnicheskikh nauk.

Gyroscopic method of orientation for underground mining.
Nauch. trudy MGI no.12:38-56 '54.

(MLRA 10:2)

(Mine surveying) (Gyrocompass)

FEDOROV, Boris Dmitriyevich

SHERSTNEV, Dmitriy Safonovich; FEDOROV, Boris Dmitriyevich;
RASHKOVSKIY, Ya.Z., redaktor; SLAVOHOSOV, A.Kh., redaktor;
MADEINSKAYA, A.A., tekhnicheskiy redaktor.

[Fundamentals of geodesy and mine surveying] Osnovy geodesii
i marksheiderskego dela. Moskva, Ugletekhizdat, 1955. 203 p.
(Surveying) (Mine surveying) (MLRA 9:1)

PHASE I BOOK EXPLOITATION 762

Pavlov, Fedor Fedorovich, Doctor of Technical Sciences, Professor;
Mashkevich, Vladimir Pavlovich, Candidate of Technical Sciences,
Docent; Fedorov, Boris Dmitriyevich, Candidate of Technical
Sciences, Docent

Geodeziya (Geodesy) Moscov, Ugletekhizdat, 1955. 356 p. 10,000
copies printed.

Responsible Ed.: Gusev, N.A.; Ed. of Publishing House: Slovorosov,
A.Kh.; Tech. Ed.: Prozorovskaya, V.L.

PURPOSE: This is a textbook designed for mining and mining engine-
ering students at the university level and for independent
study by mine workers.

COVERAGE: This manual is published for mining and metallurgical
vuzes under the auspices of the USSR Ministry of Higher Educa-
tion and was written by members of the Moscow Mining Institute
under the direction of Professor F.F. Pavlov. Chapters I, II,

Card 1/ 12

Geodesy

762

IV, VI, VII, VIII, IX, and X were written by Professor F.F. Pavlov and docents V.P. Mashkevich and B.D. Fedorov; chapters III, V, XIV, XV and Sec. 19 by B.D. Fedorov, and chapters XI, XII and XIII by Professor Pavlov. The book presents the theory and practice of geodesy as applied to modern mining and mining engineering operations. The text is accompanied by numerous diagrams, maps, photographs and tables. Instruments and methods of making measurements are described in considerable detail. By way of introduction, Chapter I provides a brief account of the historical development of geodesy and particularly its development in Russia. It concludes by stating that in 1940 the Central Scientific Research Institute of Geology and Cartography under Professor F.N. Krasovskiy, redetermined the dimensions of the Earth's ellipsoid and that all geodestic and cartographic work in the USSR as of April 7, 1946 has been based on the new dimensions. The new ellipsoid is known as the Krasovsky ellipsoid. By 1950 class I triangulations had reached a total of 75,000 km. and class I and II leveling, 150,000 km. A considerable part

Card 2/12

Geodesy

762

of the Soviet Union is now covered by a complete network of triangulations. Mentioned in the introduction as having made outstanding contributions in the fields of geodesy and cartography are Professor N.G. Kell', Professor A.S. Chebotarev, A.A. Mikhaylov, N.A. Urmayev, V.V. Danilov, and V.V. Popov, corresponding members of the USSR Academy of Sciences; F.N. Krasovskiy, A.A. Izotov, A.A. Mikhaylov and M.S. Molodenskiy who had worked out new methods of determining the shape of the Earth; and Professor Doctor F.V. Drobyshev, Professor N.M. Aleksapol'skiy, M.D. Konshin, M.M. Rusinov, V.A. Belitsyn, G.Yu. Stodolkevich, and Docent N.A. Gusev, eminent designers of geodetic instruments who have been awarded Stalin prizes for their work.

TABLE OF CONTENTS:	3
Foreword	5

Card 3/12

Fedorov, B.D.
 ABRAMOV, S.K., kand.tekhn.nauk; AVERSHIN, S.G., prof., doktor tekhn.nauk;
 AMOSOV, I.I., doktor geol.-min.nauk; ANDRIYEVSKIY, V.D., inzh.;
 ANTROPOV, A.N., inzh.; AFANAS'YEV, B.L., inzh.; BERGMAN, Ya.V.,
 inzh.; BLOKHA, Ye.Ye., inzh.; BOGACHEVA, Ye.N., inzh.; BUKRINSKIY, V.A.,
 kand.tekhn.nauk; VASIL'YEV, P.V., doktor geol.-min.nauk; VINOGRADOV,
 B.G., inzh.; GOLUBEV, S.A., inzh.; GORDIYENKO, P.D., inzh.; GUSEV, N.A.,
 kand.tekhn.nauk; DOROKHIN, I.V., kand.geol.-min.nauk; KALMYKOV, G.S.,
 inzh.; KASATOCHKIN, V.I., doktor khim.nauk; KOROLEV, I.V., inzh.;
 KOSTLIVTSEV, A.A., inzh.; KRATKOVSKIY, L.F., inzh.; KRASHCHINNIKOV, G.F.,
 prof.doktor geol.-min.nauk; KRIKUNOV, L.A., inzh.; LEVIT, D.Ye., inzh.;
 LISITSA, I.G., kand.tekhn.nauk; LUSHNIKOV, V.A., inzh.; MATVEYEV, A.K.,
 dots., kand.geol.-min.nauk; MEFURISHVILI, G.Ye., inzh.; MIRONOV, K.V.,
 inzh.; MOLCHANOV, I.I., inzh.; NAUMOVA, S.N., starshiy nauchnyy sotrudnik;
 NEKIPRELOV, V.Ye., inzh.; PAVLOV, F.F., doktor tekhn.nauk; PANYUKOV, P.N.,
 doktor geol.-min.nauk; POPOV, V.S., inzh.; PYATLIN, M.P., kand.tekhn.
 nauk; RASHKOVSKIY, Ya.Z., inzh.; ROMANOV, V.A., prof., doktor tekhn.
 nauk; RYZHOV, P.A., prof., doktor tekhn.nauk; SELYATITSKIY, G.A., inzh.;
 SPERANSKIY, M.A., inzh.; TEREENT'YEV, Ye.V., inzh.; TITOV, N.G., doktor
 khim.nauk; GOKAREV, I.F., inzh.; TROYANSKIY, S.V., prof.; doktor geol.-
 min.nauk; ~~FEDOROV, B.D.~~, dots., kand.tekhn.nauk; FEDOROV, V.S., inzh.
 [deceased]; KHOMENTOVSKIY, A.S., prof., doktor geol.-min.nauk; TROYANOV-
 SKIY, S.V., otvetstvennyy red.; TERPIGOREV, A.M., red.; KRIKUNOV, L.A.,
 red.; KUZNETSOV, I.A., red.; MIRONOV, K.V., red.; AVERSHIN, S.G., red.;
 BURTSSEV, M.P., red.; VASIL'YEV, P.V., red.; MOLCHANOV, I.I., red.;
 RYZHOV, P.A., red.; BALANDIN, V.V., inzh., red.; BLOKH, I.M., kand.
 tekhn.nauk, red.; BUKRINSKIY, V.A., kand.tekhn.nauk, red.; VOLKOV, K.Yu.,
 insh., red.; VOROB'YEV, A.A., inzh., red.; ZVONAREV, K.A., prof. doktor
 tekhn.nauk, red. (Continued on next card)

ABRAMOV, S.K.-- (continued) Card 2.

ZDANOVICH, V.G., prof., doktor tekhn.nauk, red.; IVANOV, G.A., doktor geol.-min.nauk, red.; KARAVAYEV, N.M., red.; KOROTKOV, G.V., kand.geol.-min.nauk, red.; KOROTKOV, M.V., kand.tekhn.nauk, red.; MAKKAVEYEV, A.A., doktor geol.-min.nauk, red.; OMEL'CHENKO, A.N., kand.tekhn.nauk, red.; SENDERZON, E.M., kand.geol.-min.nauk, red.; USHAKOV, I.N., dots., kand.tekhn.nauk, red.; YABLOKOV, V.S., kand.geol.-min.nauk, red.; KOROLEVA, T.I., red.izd-va; KASHAIKINA, Z.I., red.izd-va; PROZOROVSKAYA, F.L., tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Mining; an encyclopedia handbook] Gornoe delo; entsiklopedicheskii apravochnik. Glav. red. A.M.Terpigorev. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po ugol'noi promyshl. Vol.2. [Geology of coal deposits and surveying] Geologiya ugol'nykh mestorozhdenii i marksheiderskoe delo. Redkolegiia tomã S.V.Troianskiy, 1957. 646 p. (MIRA 11:5)

1. Chlen-korrespondent AN SSSR (for Karavayev)
(Coal geology—Dictionaries)

Fedorov, Boris Dmitriyevich PHASE I BOOK EXPLOITATION

Fedorov, Boris Dmitriyevich

383

Geodeziya (Geodesy) Moscow, Ugletekhizdat, 1957. 379 p. 12,000 copies printed.

RESP. ED.: Serebryanniy, A. G.; Ed. of Publishing House: Slavorosov, A. Kh.;
Tech. Ed.: Nadeinskaya, A. A.

PURPOSE : This is a textbook for the course "Geodesy" taken by students specializing in surveying at mining institutes.

COVERAGE: The author puts special emphasis on linking geodesy with other subjects in mining engineering, such as underground geometry, etc. The book supplies fundamental information on the topography of the earth's surface and on map making. Field and office work in geodetic surveying is described in considerable detail. Among other things, the book describes a number of tools and instruments used by surveyors. The majority of these descriptions are accompanied by photographs and/or diagrams. Mentioned are: measuring tapes, clinometers, cross staff, optical squares, azimuth and prismatic compass, transits and their optical parts (among them the following transits: TT-1, TT-2, TT-50 and OT-10), an office computer, planimeter, dumpy levels (among them the types NV-1 and NG); Y-levels (types NP-1 and NT), "Geofizika" precision level, Stodolkevich level (type NS), automatic level mounted on a bicycle (designed by M. P. Leontovskiy and K. P. Nechiporenko), Artanov automatic level, the Raabek automatic level;
Card 1/14

Geodesy

383

levelling rods; cross-hair and other range-finders, two automatic tachometers (the Stodolkevich type and type NF; plane tables and alidades, phototheodolite, aerial photographic camera, projection lamp, and aneroid barometer. The following Soviet instrument designers are mentioned: Professor F. V. Drobyshev, Professor M. D. Konshin, Professor M. M. Rusinov, Professor I. M. Aleksapol'skiy, Professor V. A. Belitsyn, Professor M. P. Leontovskiy, Professor K. P. Nechiporenko, Professor A. P. Bolotov, Docent G. Yu. Stodolkevich and Doctor N. A. Gusev, Engineer M. A. Artanov and Engineer Ye. V. Raabek. The following Soviet scientists are mentioned in the field of earth science: Professor F. N. Krasovskiy, Professor A. A. Izotov, Professor A. A. Mikhaylov, and Professor M. S. Molodenskiy. The following Soviet scientists are mentioned in the field of geodesy and cartography: Professor N. G. Kell', Professor A. S. Chebotarev, Professor N. A. Urmayev, Professor V. V. Danilov, and Professor V. V. Popov. There are 281 figures, 32 Soviet references, and 30 tables. Some of the tables give specifications of instruments.

Card 2/14

KOLCHIN, Viktor Pavlovich; FEDOROV, B.D., dots., retsenzent; SEREBRYANYI,
A.G., inzh., otvetstvennyy red.; LOMILINA, L.N., tekhn. red.

[Collection of problems and exercises in surveying] Sbornik zadach
i uprazhnenii po geodezii. [Moskva] Ugletekhizdat, 1958. 214 p.
(Surveying) (MIRA 11:9)

GUSEV, Nikolay Andreyevich; FEDOROV, B.D., otv.red.; SLAVOROSOV, A.Kh.,
red.izd-va; IL'INSKAYA, G.M., tekhn.red.; LOMILINA, L.N.,
tekhn.red.

[Mine surveying instruments] Marksheidersko-geodezicheskie
pribory i intrumentovedenie. Moskva, Ugletekhizdat, 1958.
522 p. (MIRA 12:4)

(Mine surveying--Equipment and supplies)

PAVLOV, Fedor Fedorovich, prof.; MASHKEVICH, Vladimir Pavlovich, dots.;
FEDOROV, Boris Dmitriyevich, dots.; RODIONOV, L.Ye., otv. red.;
SLAVOROSOV, A.Kh., red. izd-va; BOLDYREVA, Z.A., tekhn.red.;
PROZOROVSKAYA, V.L., tekhn. red.

[Geodesy] Geodeziia. Moskva, Gos. nauchno-tekhn. izd-vo lit-
ry po gornomu delu, 1961. 274 p. (MIRA 14:5)

1. Moskovskiy gornyy institut (for Pavlov, Mashkevich, Fedorov)
(Surveying)

FEDOROV, Boris Dmitriyevich; SLAVOROSOV, A.Kh., red.izd-va; BOLDYREVA,
Z.A., tekhn. red.

[Geodesy] Geodeziia. Moskva, Gos. nauchno-tekhn. izd-vo lit-
ry po gornomu delu, 1961. 335 p. (MIRA 15:2)
(Surveying)

FEDOROV, Boris Dmitriyevich; SLAVOROSOV, Aleksey Kharitonovich;
KOROLEVA, T.I., red. izd-va; BOLDYREVA, Z.A., tekhn.
red.; LAMILINA, L.N., tekhn. red.

[Principles of geodesy and mining surveying] Osnovy geodezii
i marksheiderskogo dela. Moskva, Gosgortekhnizdat, 1962. 327 p.
(MIRA 15:9)

(Geodesy) (Mine surveying)

FEDOROV, B.F., inzh.

How to construct a simple laser for demonstration purposes.
Svetokhnika 9 no.8:27-29 Ag '63. (MIRA 16:8)

1. Akademiya imeni F.E. Dzerzhinskogo.
(Lasers)

IZNAR, Andrey Nikolayevich; FEDOROV, Boris Fedorovich; VOLKOVA,
I.M., red.

[Optical quantum devices (lasers) and their use in
military technology; according to materials of the foreign
press] Opticheskie kvantovye pribory (lazery) i ikh pri-
menenie v voennoi tek' nike; po materialam zarubezhnoi pe-
chati. Moskva, "Sovetskoe radio," 1964. 173 p.

(MIRA 17:7)

FEDOROV, B.F.; MOSKALEV, S.M.; SHAKHRAY, M.L., professor, redaktor.

[Mechanization of fitting and assembly work] Mekhanizatsiia
slesarne-sborechnykh rabot. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1950. 231 p. (MIRA 7:5)
(Machinery--Construction)

FEDOROV, B.F.; MURAV'YEV, K.N., retsentsent, inzhener, KONUYKHOV, S.M.
Redaktor, inzhener, STUDNETSYN, B.P., redaktor; DUGINA, N.A.,
tekhnikheskiy redaktor.

[An efficient method for force-fitting and disassembling pressure-fitted machine parts] Ratsional'nyi sposob raspressovki i zapressovki detalei. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1955. 65 p. (MLRA 8:11)
(Machine-shop practice)

MURAV'YEV, K.N.; KONYUKHOV, S.M., dotsent; VUL'FIN, Z.B.; FEDOROV, B.F.,
inzhener, retsenzent; KOROLEV, M.F., inzhener, retsenzent.

[Machine shop practice] Slesarno-sborochnoe delo. Pod red. S.M.Koniu-
khova. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry,
1955. 403 p. (MIRA 8:4)
(Machine-shop practice)

Fedorov, B.F.

MURAV'YEV, K.N.; KONYUKHOV, S.M., dots., red.; VUL'FIN, Z.B.; FEDOROV, B.F.,
inzh., retsenzent; KOROLEV, M.F., inzh., retsenzent; DUGIN, N.A.,
tekhn. red.

[Work of mechanic and fitter] Slesarno-sborochnoe delo. Pod red.
S.M. Koniukhova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.
lit-ry, 1956. 397 p. (MIRA 11:7)

(Machine-shop practice)

28(1);25(1)

PHASE I BOOK EXPLOITATION

SOV/2971

Fedorov, Boris Fedorovich

Mekhanizatsiya slesarno-sborochnykh i montazhnykh rabot (Mechanization of Bench and Assembly Work) Moscow, Mashgiz, 1957. 306 p. Errata slip inserted. 18,000 copies printed.

Tech. Ed.: G.A. Sarafannikova; Reviewer: M.P. Novikov, Candidate of Technical Sciences; Ed.: M.A. Bezukladnikov, Engineer; Ed. (Ural-Siberian Division, Mashgiz): M.I. Sustavov, Engineer.

PURPOSE: This book is intended for mechanics and machinists studying to improve their skill.

COVERAGE: The book deals with the fundamentals of mechanization in machine-assembly work. The information given is based on practices of Soviet and non-Soviet plants, work done at scientific research institutes, and progress made by industrial innovators. Basic operations involved in bench and assembly work are treated from the point of view of proposed mechanization. Examples of the use

Card 1/6

Mechanization of Bench and Assembly Work

SOV/2971

of various fixtures, devices, and mechanisms are given. Modern mechanized and electrified tools for assembly work are described and illustrated. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Preface	3
Ch. I. General Information on the Organization of Bench and Assembly Work	5
Machine-assembly technique	5
Organization of bench and assembly work	8
Fitting work	9
Mechanization of assembly work	12
Economic advantages of mechanization	13
Ch. II. Mechanization of Layout Procedure	16
General information	16
Tools of the layout man	16
Fixtures and instruments	27

Card 2/ 6

Mechanization of Bench and Assembly Work	SOV/2971
Ch. III. Mechanization of Cutting, Shearing, and Straightening	37
Cutting off metal	37
Shearing sheet, plate, and shaped metal	40
Cutting pipe	46
Cutting metal with abrasive wheels	49
Straightening metal	50
Bending pipe	52
Ch. IV. Mechanization of Filing and Trimming	61
Filing	61
Trimming	69
Wet abrasive blasting	76
Ch. V. Mechanization of Scraping and Lapping	78
General information	78
Mechanized scrapers	78
Fixtures for scraping	83
Replacing the scraping process with more efficient methods	87
Lapping	93

Card 3/6

Mechanization of Bench and Assembly Work	SOV/2971
Ch. VI. Mechanization of the Machining of Holes	106
General information	106
Drilling and countersinking	110
Drilling machines and fixtures	116
Electro-erosion machining of holes	125
Reaming	127
Threading	130
Ch. VII. Mechanization of Assembly of Stationary Detachable Joints	138
Preparation of parts for assembly	138
Assembly of threaded joints	141
Assembly of key joints	166
Assembly of splined and tapered joints	169
Assembly of pipe joints	171
Ch. VIII. Mechanization of Assembly of Permanent Joints	176
General information	176
Pressing parts in presses and fixtures	176
Other methods of pressing in	182
Stripping of pressed-in parts	188

Card 4/6

Mechanization of Bench and Assembly Work

SOV/2971

Riveted joints	193
Welded joints	199
Ch. IX. Mechanization of the Assembly of Units and Mechanisms on Machines	203
Assembly of sliding-contact bearings	203
Assembly of units with rolling-contact bearings	209
Assembly of shafts and axles	217
Assembly of drive mechanisms	219
Assembly of units with translatory motion	228
Assembly of piston groups	232
Assembly of hydraulic actuators and drives	237
Ch. X. Mechanization of Mounting Work	246
General information	246
Props, supports, and stands	247
Fixtures and mechanized tools	250
Use of models of parts and groups	253
Devices for checking alignment of shafts	255

Card 5/6

Mechanization of Bench and Assembly Work	SOV/2971
Providing a machine with fuel, water, and lubricant	257
Testing of machines	260
Special tests of machines	273
Painting machines	275
Ch. XI. Mechanization of Hoisting and Conveying Operations	286
General information	286
Hoisting operations	286
Conveying operations	295
Ch. XII. Safety Engineering	303
General considerations	303
Safety rules for assembly operations	304
Safety rules for testing units and machines	306

AVAILABLE: Library of Congress (TJ 1160.F 37)

Card 6/6

VK/bg
2-3-60

25(5)

PHASE I BOOK EXPLOITATION

SOV/1668

Fedorov, Boris Fedorovich

Povysheniye proizvoditel'nosti truda pri sborke mashin (Increasing Labor Productivity in Assembling Machinery) Moscow, Mashgiz, 1958. 77 p. (Series: Biblioteka slesarya-sborshchika, vyp. 1) 10,000 copies printed.

Editorial Board of Series: S.N. Gorshkov, Engineer, A.A. Lobanov, Engineer, M.P. Novikov, Candidate of Technical Sciences, V.T. Poluyanov, Engineer, M.I. Sustavov, Engineer, B.F. Fedorov, Candidate of Technical Sciences; Ed. of Publishing House: M.I. Sustavov; Tech. Ed.: N.A. Dugina.

PURPOSE: The pamphlet is intended for assembly mechanics.

COVERAGE: This pamphlet is the first of a series on the latest engineering developments in assembling machines. It describes various types of production and assembling methods and emphasizes the basic means of increasing labor productivity. Among the latter

Card 1/3

Increasing Labor Productivity (Cont.)

SOV/1668

are improved assembly techniques, overall mechanization and automatization of bench-assembly operations, and improved organization of labor tasks during assembly operations. There are 5 Soviet references. No personalities are mentioned.

TABLE OF CONTENTS:

Introduction	3
Ch. I. Types of Production and Methods of Assembling Machines	6
Single unit production	6
Lot production	8
Mass production	9
Assembly methods	10
Means of increasing labor productivity in assembling	16
Ch. II. Increasing the Engineering Utility of Machines In Assembling	18
Engineering utility of designs	19
Calculation of dimensional chains	27
Machine-manufacturing technology	30
Observance of engineering requirements	34

Card 2/3

Increasing Labor Productivity (Cont.)

SOV/1668

Ch. III. Overall Mechanization and Automatization of Bench and Assembly Operations	35
Developmental stages in mechanizing labor going into assembly operations	35
Use of mechanized tools	37
Use of machine tools for carrying out labor-consuming bench and assembly operations	46
Replacement of labor-consuming operations with those of a more productive nature	52
Use of special tools	62
Use of special attachments	65
Automatization of assembly operations	70
Ch. IV. Organization of Production in Assembling	74
Organization of assembly operations	74
Organization of assembly work stations	76
Planning assembly operations	77
Increasing the technical competence of assembly mechanics	77
Bibliography	78
AVAILABLE: Library of Congress (TJ241.F4)	
Card 3/3	JG/ad 7-8-59

S/708/59/000/002/008/008
D221/D303

AUTHOR: Fedorov, B.F., Candidate of Technical Sciences
TITLE: The new technological process of expanding and pressing-in of connections
SOURCE: Izhevsk. Mekhanicheskiy institut. Voprosy tochnosti metallorezhushchikh stankov i mekhanicheskoy obrabotki, no. 2, 1959, 100 - 112

TEXT: The process of stripping parts fitted under pressure was investigated. It concerned the formation of an oil film between the mated surfaces. The oil pressed by hand pumps provides a fluid friction between the conjugated surfaces and, therefore, reduces the effort required for stripping. This pressure of oil is determined by $p = p_1 + p_2 + p_3$, where p_1 is the oil pressure necessary to counter the pressure in the contact zone; p_2 the oil pressure required for the sleeve expansion, p_3 is the pressure corresponding to the additional expansion of sleeve and compression of shaft for en-
Card 1/3

The new technological process ...

S/708/59/000/002/008/008
D221/D303

During a formation of an oil film between them. Equations are quoted for each component which take into account the deformations, surface roughness, moduli of the materials, dimensions and other factors. The use of high pressure caused some doubts as to the possibility of exceeding the limits of elastic deformations, but the calculations and experiments demonstrated that there is no such risk. A detailed description is given of the hand pump. The tests demonstrated the feasibility of stripping by using any mineral oil. The disposition of the oil groove affects the effort of stripping. The duration of the press fit does not affect the oil pressure. The diagrams of stripping with and without oil pressure indicate a marked difference. The possibility of press fit with the use of oil pressure was established. Nomograms were plotted on the basis of the equation of oil pressure which is required for calculating the quantities in question. These curves are applicable for connections of components made in normalized steel, and moduli of elasticity of the sleeve up to 2100000 kg/cm^2 , or 2000000 kg/cm^2 for the shaft. A numerical example of application of this chart is given. This new method reduces the service cycle for equipment. Repeated pressing

Card 2/3

The new technological process ...

S/708/59/000/002/008/008
D221/D303

of the fitments is possible, and heat expansion can be employed for reliable connection. There are 8 figures and 4 references: 2 Soviet -bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: A. Stewart and Murray, 'Power', v. 94 no. 4, 1950; Erland Bratt, The Machinist, L., v. 92, no. 47, 1949.



Card 3/3

PHASE I BOOK EXPLOITATION

SOV/3806

Fedorov, Boris Fedorovich

Mekhanizatsiya i avtomatizatsiya sborochnykh rabot (Mechanization and Automation of Assembling) Moscow, Mashgiz, 1959. 105 p. (Series: Biblioteka slesarya-sborshchika, vyp. 8) 12,000 copies printed.

Ed. of Publishing House: M.I. Sustavov; Tech. Ed.: N.A. Dugina; Editorial Board of Series: S.M. Konyukhov, Engineer; M.P. Novikov, Candidate of Technical Sciences; V.T. Poluyanov, Engineer; A.N. Ryabov, Engineer; M.I. Sustavov, Engineer (Ed. of Book); and B.F. Fedorov, Candidate of Technical Sciences.

PURPOSE: The book is intended for assemblers.

COVERAGE: The author of this book, the 8th issue of the "Benchmark Assembler's Library," discusses the basic trends in mechanization and automation of assembly operations. He describes briefly modern means of full mechanization and mentions the economic advantages of introducing partial and total mechanization and automation into the assembly process. Many examples of achievements in the field

Card 1/3

Mechanization and Automation of Assembling

80V/3806

of mechanization and automation are cited. Directions of further development and the transition process from partial to complete mechanization are indicated. No personalities are mentioned. There are 11 references, all Soviet.

TABLE OF CONTENTS:

Ch. I. Mechanization and Automation of Assembly	3
Stages in development of mechanization	5
Preparation of conditions for mechanization and automation of assembly	6
Ch. II. Small-Scale Mechanization of Assembly	10
Use of fixtures, devices, and mechanisms	11
Use of mechanized and special tools	14
Improvement of assembly process	22
Ch. III. Full Mechanization of Assembly	27
Mechanization of preparatory operations	33
Mechanization of assembling units	50
Mechanization of assembling machines	63
Mechanization of conveying and hoisting	68

Card 2/3

Mechanization and Automation of Assembling

80V/3806

Mechanization of finishing operations

70

Ch. IV. Automation of Assembly

Partial automation of assembly

80

Full automation of assembly

81

Economic expediency of mechanization and automation

97

102

Bibliography

107

AVAILABLE: Library of Congress (TJ1160.F375)

Card 3/3

VK/vbc/mas
7-28-60

FEDOROV, Boris Fedorovich; P'YANKOV, Fedor Porfir'yevich; DUGINA, N.A.,
tekhn. red.

[Establishing norms for fitting and assembling operations] Normiro-
vanie slesarno-sborochnykh rabot. Moskva, Mashgiz, 1961. 49 p.
(Biblioteka slesaria - sborshchika, no.11) (MIRA 15:1)
(Factory management)

MODZELEVSKIY, Aleksandr Aleksandrovich; NOVIKOV, M.P., kand. tekhn. nauk, red.; POLUYANOV, V.T., inzh., red.; KYABOV, A.N., inzh., red.; SUSTAVOV, M.I., inzh., red.; FEDOROV, B.F., kand. tekhn. nauk, red.; DELYUKIN, L.N., red. izd-va; DUGINA, N.A., tekhn. red.

[Technological processes in assembling movable joints] Tekhnologiya sbornki podvishnykh soedinenii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 71 p. (Biblioteka slesaria-sborshchika, no.7) (MIRA 14:11)
(Couplings) (Machine-shop practice)

KIKTENKO, V.S.; SAFRONOV, Yu.P.; KUDRYAVTSEV, S.I.; EL'MAN, R.I.;
FEDOROV, B.F.; PUSHCHIN, N.I.; FEDOROVICH, A.A.

Arrangement for automatic count of the particles of a bacterial
aerosol. Lab. del. 7 no. 10:57-60 0 '61. (MIRA 14:10)
(AEROSOLS)

KIKTENKO, V.S., doktor med.nauk, prof.; SAFRONOV, Yu.P., kand.tekhn.nauk;
KUDRYAVTSEV, S.I.; EL'MAN, R.I.; FEDOROV, B.F.; PUSHCHIN, N.I.;
FEDOROVICH, A.A.

Photoelectronic count of the number of aerosol particles of organic
and inorganic origin. Gig. i san. 26 no.2:47-53 F '61.

(MIRA 14:10)

(AEROSOLS)

FEDOROV, Boris Fedorovich; DUGINA, N.A., tekhn. red.

[Increasing labor productivity in machinery assembly shops]
Povyshenie proizvoditel'nosti truda na sborke mashin. Izd.2.
Moskva, Mashgiz, 1962. 57 p. (Biblioteka slesaria-sborshchika,
no.1) (MIRA 16:2)
(Machine-Shop practice)

FEDOROV, Boris Fedorovich; P'YANKOV, Fedor Porfir'yevich; DUGINA, N.A.,
tekh. red.

[Devices, mechanisms, and systems for hoisting and conveying operations in the assembling of machinery] Prispobleniia, mekhanizmy i ustroistva dlia pod'emno-transportnykh operatsii na sborke. Moskva, Mashgiz, 1962. 77 p. (Biblioteka slesaria-sborshchika, no.8) (MIRA 15:6)
(Hoisting machinery) (Conveying machinery)

FEDOROV, Boris Fedorovich; DELYUKIN, L.N., red. izd-va; DUGINA, N.A.,
tekh. red.

[Precision of assembly and quality control in fitting and as-
sembling operations] Tochnost' sborki i kontrol' kachestva
slesarno-sborochnykh rabot. Moskva, Mashgiz, 1962. 102 p.
(Biblioteka slesaria-sborshchika, no.10) (MIRA 15:6)
(Machine-shop practice)

FEDOROV, Boris Fedorovich; SLOBODYANNIKOV, S.S., kand.tekhn.nauk,
retsenzent; TOLSTOV, M.A., inzh., retsenzent; BOGOSLAVETS,
N.P., tekhn.red.

[Mechanization and automation of fitting and assembling
operations] Mekhanizatsiia i avtomatizatsiia slesarno-
sborochnykh robot. Moskva, Mashgiz, 1962. 310 p.

(MIRA 15:5)

(Assembly-line methods) (Machine-shop practice)
(Automation)

STORUBLENKOV, Vladislav Pavlovich; FEDOROV, B.F., red.; SYCHEVA,
V.A., tekhn. red.

[The lights of the beacons are burning] Goriat ogni maiakov.
Murmansk, Murmanskoe knizhnoe izd-vo, 1962. 39 p.

(MIRA 16:6)

(Murmansk region--Fisheries--Labor productivity)

SAMOYLOV, Sergey Ivanovich, prof.; GORELOV, Valentin Mikhaylovich, inzh.;
BRASLAVSKIY, Veniamin Markovich, kand. tekhn. nauk; KONDRATOV,
Yuriy Nikolayevich, inzh.; KALININ, Ignat Andreyevich, inzh.;
KUROCHKIN, Vasiliy Mikhaylovich, inzh.; POPOV, Vladimir
Artem'yevich, inzh.; KOZLOV, Kirill Georgiyevich, inzh.; FEDOROV,
Boris Fedorovich, kand. tekhn.nauk; STEPANOV, Valantin
Vladimirovich, kand. tekhn. nauk; DUGINA, N.A., tekhn. red.

[Technological processes in the manufacture of heavy machinery]
Tekhnologiya tiazhelogo mashinostroeniia. Pod red. S.I.Samoilova
Moskva, Mashgiz, 1962. 589 p. (MIRA 16:4)
(Machinery industry)

FEDOROV, B.I., arkhitekto; LMSOV, N.M., inzhener-konstruktor; OSTROUMOV, A.N., redaktor

[Poultry house for 1,000 ducks (frame walls); brick columns with fillings of logs and adobe. Model no.15-28] Utiatnik na 1000 golov (steny karkasnye); kirpichnye stolby s zapolneniem iz breven ili samana. Proekt No. 15-28. Moskva, 1956. 15 p. 7 fold. 1. (MIRA 9:12)

1. Russia (1923- U.S.S.R.) Ministerstvo gorodakogo i sel'skogo stroitel'stva.
(Poultry houses and equipment)

FEDOROV, B.I., arkhitektor; ARKHANGEL'SKIY, P.Ye., inzhener-konstruktor;
GLAGOLEV, L.S., inzhener-teplotekhnik; KUDRYAVTSEVA, Ye.V., inzhener-
elektrik; OSTROUMOV, A.N., redaktor

[Poultry house for 5,000 chicks; model no.15-26] Tsyplyatnik na 5000
golov. Proekt No.15-26. Moskva, 1956. 31 p. (MLRA 9:12)

1. Russia (1923- U.S.S.R.) Ministerstvo gorodskogo i sel'skogo
stroitel'stva.
(Poultry houses and equipment)

S/170/61/004/002/011/018
B019/B060

AUTHORS: Fedorov, B. I., Shul'man, Z. P.

TITLE: Use of Permeable Porous Ceramics for the Experimental Study of Mass Exchange Effects

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1961, Vol. 4, No. 2, pp. 99-102

TEXT: A description is first given of the preparation of porous ceramics made of 75% chamotte, 12.5% kaolin, 12.5% clay, and 0.5% water glass, intended to serve for a study of mass exchange phenomena. The components were pulverized, treated with water (30 per cent by weight), transferred to suitable molds, dried, and burned. The pore size was determined by a method devised by Ritter and Drace (Ref. 5), in which mercury is pressed through the ceramics. A formula is given for the diameter distribution of radii, and formulas by B. V. Deryagin are also given for the calculation of the specific surface of the ceramics and the permeability to air. Experimental results obtained show that permeability, specific surface,

Card 1/2

Use of Permeable Porous Ceramics for the
Experimental Study of Mass Exchange Effects

S/170/61/004/002/011/018
B019/B060

and maximum pore radius can be reduced by better grinding of the components, and by burning at lower temperatures (which, however, entails an impairment of mechanical properties). There are 3 figures and 6 references: 5 Soviet and 1 US. ✓

ASSOCIATION: Institut energetiki AN BSSR, g. Minsk (Institute of Power Engineering of the AS BSSR, Minsk)

SUBMITTED: October 26, 1960

Card 2/2

ACCESSION NR: AP4011533

8/0170/64/000/001/0021/0027

AUTHOR: Fedorov, B. I.

TITLE: Experimental study of water transpiration cooling in a non-isothermic turbulent boundary layer

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 1, 1964, 21-27

TOPIC TAGS: transpiration cooling, porous plate, heat transfer, mass transfer, turbulent boundary layer

ABSTRACT: Results are given of an experimental investigation of transpiration cooling by water of a porous ceramic plate under conditions of a turbulent boundary layer in a gradient air flow. The test equipment is shown in a sketch and is described in detail. The ambient temperature ranged from 50 to 130 C and the local Reynolds numbers from $(1.5 \text{ to } 3.5) \times 10^5$. Heat and mass transfer coefficients were determined by the heat substance balance both at the wall and in the boundary layer. Dimensionless formulas are derived for the combined rate of heat and mass transfer. The effect of the longitudinal pressure gradient and moderate turbulence on transpiration cooling is estimated. Orig. art. has 4 figs.

Card 1/2

ACCESSION NR: AP4011533

ASSOCIATION: Institut teplo-i massoobmena AN BSSR, Minsk (Institute of Heat and Mass Transfer, Academy of Sciences BSSR)

SUBMITTED: 14Sep63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH, AI

NO REF SOV: 007

OTHER: 000

Card 2/2

ACCESSION NR: AT4041819

S/2563/64/000/230/0139/0142

AUTHOR: Ayerov, V. Ye.; Fedorov, B. I.

TITLE: Measurements of turbulent non-isothermal flow

SOURCE: Leningrad. Politeknicheskii Institut. Trudy*, no. 230, 1964.
Tekhnicheskaya gidromekhanika (Technical hydromechanics), 139-142

TOPIC TAGS: hot-wire anemometer, heat exchange, mass exchange, turbulence, turbulent flow, anemometer, non-isothermal flow

ABSTRACT: Some of the relationships in the combined processes of heat and mass exchange in a general hydrodynamic field are investigated. It was previously established that when these processes occur separately, turbulence in a flow increases the intensity of heat and mass exchange. In the present study, a hot-wire anemometer with a feedback amplifier of the type ATA-2, built by G. V. Smirnov, was used in measurements of non-isothermal flow. A short discussion is given on the precautions and corrections necessary in the use of this type of anemometer. One of the basic factors in the investigation of the influence of mass exchange on heat exchange is the influence of flow temperature on the degree of turbulence. This was investigated in an aerodynamic set-up of a closed type at zero, positive and negative pressure gradients. The results are shown in Fig. 1 of the Enclosure Card 1/4

ACCESSION NR: AT4041819

and indicate clearly that the degree of flow turbulence decreases with increasing temperature. This is explained by an increase in medium viscosity with increasing temperature, which leads to a decrease in amplitude of the turbulent pulsation of the flow. In the absence of a gradient, an increase in temperature from 20 to 130C leads to a decrease in turbulence by a factor of two. As shown in Fig. 2 of the Enclosure, an increase in the Reynolds number causes a considerable reduction in the degree of turbulence in a cold or heated flow. This is, however, an unexpected result which should be investigated further. It is concluded that the hot-wire anemometer ATA-2 can be very useful in the investigation of non-isothermal flow. Orig. art. has: 3 figures and 2 formulas.

ASSOCIATION: Leningradskiy politekhnicheskii Institut Im. M. I. Kalinina
(Leningrad Polytechnical Institute)

SUBMITTED: 00

ENCL: 02

SUB CODE: ME

NO REF SOV: 005

OTHER: 002

Card 2/4

ACCESSION NR: AT4041819

ENCLOSURE: 01

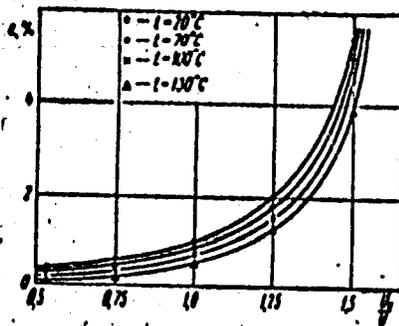


Fig. 1. Dependence of turbulence on the relative rate of flow at various temperatures.

Card: 3/4

1 2721-00 EWT(1)/EWP(e)/EWP(m)/EWT(m)/ETC/EPF(n)-2/EMG(m)/EWP(t)/EWP(k)/EWP(z)
ACC NR: AT5027195 FCS(k)/EWP(b)/EWA(1) UR/0000/65/000/000/0070/0085
44, 55 JD/WH/GS 44, 55 44, 55

AUTHOR: Smol'skiy, B. M.; Shul'man, Z. P.; Fedorov, B. I. 89
44, 55

ORG? Institute of Heat and Mass Transfer AN BSSR, Minsk (Institut
teplo- i massoobmena AN BSSR) 44, 55

TITLE: Heat and mass transfer in a boundary layer on a porous wall

SOURCE: AN BSSR. Institut teplo- i massoobmena. Teplo- i massoobmen
tel s okruzhayushchey gazovoy sredoy (Heat and mass exchange of
bodies with the surrounding gaseous medium). Minsk, Nauka i Tekhnika,
1965, 70-85

TOPIC TAGS: ^{1, 55} boundary layer theory, ^{21, 44, 55} heat transfer, ^{21, 44, 55} mass transfer,
turbulent boundary layer, vaporization, surface property

ABSTRACT: The article considers the thermodynamic and hydromechanical characteristics of the process of evaporation of a drop-form liquid from a porous wall. The experimental sample (illustrated in a figure) was a glass with a diameter of 0.054 meters and a length of 0.25 meters, equipped with an ice calorimeter insulated from the rest of the internal space. The experiments were carried out in an aerodynamic tube with a sealed working section. The velocity of the

Card 1/3

L 8927-66

ACC NR: AT5027195

air flow could be varied smoothly from 2 to 18 meters/sec, and the temperature of the flow was measured from 15 to 150°C. The experimental conditions were the following: flow temperature--70, 100, 130°C; moisture content of the medium and Φ --4.1 and 0.5%, respectively; flow velocity--6, 10, 12, and 15 meters/sec. The range of Reynolds numbers, consequently, was $(2-7) \times 10^4$. The generalized relationship found for the whole range of experimental parameters for the front end of the surface of the cylinder had the form:

$$Nu_x = 1.48(e^{-2.4x} + 0.2e^{-5.5x}) \sqrt{Re_x} K^{0.25} \quad (2)$$

The coefficients and the power exponents in the above formula were found by the method of least squares. The article proceeds to consider the question of developed turbulent flow in the boundary layer. The experiments on heat and mass transfer were carried out on the evaporation of water in a turbulent boundary layer from a flat ceramic fireclay plate, in a flow of heated air with a gradient. The velocity of the air flow in the working column of the aerodynamic tube was varied from 2 to 50 meters/sec. The experimental body was a single porous plate, mounted in a box divided into 8 subchambers by partitions. Measurements were made of the velocity and the temperature of the flow, the degree of its turbulence under each set of

Card 2/3

L 8927-66

ACC NR: AT5027195

temperature and velocity conditions, and the temperatures of the surface of the plate (at 16 points), the side walls of the box, the water in each chamber, and the walls of the working column. In this case, the following relationship was established:

$$Nu_p = 0.036 Re^{0.8} (1 - b_r)^{1/4}; \quad Nu_m = 0.03 Re^{0.4} (1 - b_r)^{1/4} \quad (5)$$

Orig. art. has: 6 formulas and 10 figures.

SUB CODE: ME, GO, TD/ SUBM DATE: 02Jul65/ ORIG REF: 014

OTH REF: 005

PC
Card 3/3

U 0035-66 INT (1) / ETC / EPT (1) -2/ EWG (m) WW

ACC-NR: AT5027200 UR/0000/65/000/000/0143/0147 66

AUTHOR: ^{44,55} Ayerov, V.Ye.; ^{44,55} Martynenko, O.G.; ^{44,55} Revzin, I.S.; ^{44,55} Fedorov, B.I. 67

ORG: ^{44,55} Heat and Mass Transfer Institute, AN BSSR, Minsk (Institut teplo-1 massoobmena AN BSSR)

TITLE: Effect of the turbulizing of a stream of air on heat transfer in a radiator

SOURCE: AN BSSR. Institut teplo-1 massoobmena. Teplo-1 massoobmen tel s okruzhayushohey gazovoy sredoy (Heat and mass exchange of bodies with the surrounding gaseous medium). Minsk, Nauka i Tekhnika, 1965, 143-147

TOPIC TAGS: heat transfer, engine radiator, ^{21.44.55} turbulent heat transfer

ABSTRACT: Existing experimental data show that the use of a previously turbulized stream of air in various types of industrial heat exchangers can substantially increase their efficiency. Experiments were carried out on heat exchange in an oil radiator of the automobile type, with different degrees of turbulizing of the stream of air being blown through it. Hot oil from the lubricating system of a motor was circulated through a tube plate radiator. The article shows a sketch of the

Card 1/2

2

L 0035-00

ACC NR: AT5027200

experimental setup. At constant loads and constant revolutions of the motor and the fan, measurements were made of the temperature of the walls of the radiator tubes as well as of the temperature of oil and air at the inlet and outlet of the radiator. In addition to the temperature measurements, determinations were made of the velocity field and the degree of turbulence of the stream of air before and after the radiator. Thermodynamic calculations based on the experimental data show that the efficiency of a radiator using a "pusher" fan increased by 25% on the average. The authors conclude that the installation of "pusher" fans on transport vehicles would permit a significant reduction in the size and weight of the radiator, which would make possible a substantial saving of nonferrous metal. Orig. art. has: 3 figures and 1 table

SUB CODE: ME/ SUEM DATE: 02Jul65/ ORIG REF: 004 OTH REF: 003

LVK
Card 2/2

L 11537-66 EWT(d)/FSS-2/EWT(1)/FS(v)-3/EEC(k)-2/EWA(d) AST/GW

ACC NR: AR6001125

SOURCE CODE: UR/0269/65/000/009/0013/0013

SOURCE: Ref. zh. Astronomiya, Abs. 9.51.130

AUTHOR: Fedorov, B. I.

TITLE: On variations in the delay of radio signals in the PRV receiver

REFERENCED SOURCE: Byul. st. optich. nablyudeniya iskusstv. sputnikov Zemli, no. 40, 1964, 19-20

TOPIC TAGS: artificial earth satellite, artificial satellite observation, radio receiver, radio signal, chronograph/ PRV radio receiver

TRANSLATION: A method for determining the delay of radio signals at each passage of a satellite has been developed at the Artificial Earth Satellite Observation Station of Leningrad University. During 1962, the receiver-attachment-chronograph delay was, on the average, +0.0119 + 0.0016 sec. The average delay of the attachment-chronograph circuit was +0.0091 + 0.0011 sec. The difference, which is the actual average delay of only the PRV receiver, was +0.0028 sec. The delay of the entire receiver-pulse attachment -chronograph system for each artificial earth satellite observation was begun to be accounted for at the station from 1962. P. U.

SUB CODE: 03, 17

Card 1

UDC: 529.76:629.195.1

L 46754-66 EHT(d)/FSS-2/EHT(1)/EEO(k)-2 GN

ACC NR: AR6004338

SOURCE CODE: UR/0274/65/000/009/B052/B052

AUTHOR: Fedorov, B. I.

REF SOURCE: Byul. st. optich. nablyudeniya iskusstv. sputnikov Zemli, no. 40, 1964, 19-20

TITLE: Fluctuations in radio signal delay in an RF receiver

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 9B358

TOPIC TAGS: artificial satellite observation, radio signal, circuit delay time, RF pulse

TRANSLATION: At an artificial earth satellite observation station attached to Leningrad University, a method of measuring the delay of radio signals on each passage of a satellite has been developed. A description of its application is given. It is shown that on the average in 1962, the delay of the receiver-adapter-chronograph circuit was 0.0119 ± 11 sec. The average delay of the adapter-chronograph circuit, however, was 0.0091 ± 11 sec. The difference, comprising the true average delay of the RF receiver alone, was approximately $+0.0028$ seconds. Since 1962, the delay of the entire system--receiver, pulse, adapter, and chronograph--has been considered at the station for each observation of an artificial earth satellite. P. U.

SUB CODE: 17,22/ SUBM DATE: none

UDC: 621.396.62:621.396.946

Card 1/1

SHCHERBAKOV, I.F.; GUSEV, M.I., redaktor; FEDOROV, B.M., redaktor; KARASIK,
N.P., tekhnicheskiy redaktor.

[Manual for the locomobile fireman and machinist] Posobie kochegaru
i mashinistu lokomobilia. Moskva, Goslesbumizdat, 1954. 83 p.
(Steam engines) (MIRA 8:5)

LASOCHKIN, Pavel Vladimirovich; IZRAL'YANTS, Vasilii Mikhaylovich; BEL'SKIY
I.R., redaktor; FEDOROV, B.M., redaktor; SHITS, V.P., tekhnicheskiy
redaktor.

[Operating selenium rectifiers] Eksploatatsiia selenovykh vypriami-
telei. Moskva, Goslesbunizdat, 1955. 30 p. (MLRA 9:5)
(Electric current rectifiers)

FEDOROV, B.M.; GROMOVA, Ye.A.; TKACHENKO, K.N.; PODREZOVA, N.A.

Changes in the electric activity of the brain in experimental myocardial infarct and disorders of the cardiac rhythm. Trudy Inst. norm. i pat. fiziol. AMN SSSR 6:113-115 '62 (MIRA 17:1)

1. Laboratoriya infektsionnoy patologii (zav. - chlen-korrespondent AMN SSSR, prof. A. Ya. Alymov) Instituta normal'noy i patologicheskoy fiziologii AMN SSSR.

FEDOROV, B.M.; PODREZOVA, N.A.

Nervous system among the mechanisms normalizing the activity of the cardiac rhythm. Trudy Inst. norm. i pat. fiziol. AMN SSSR 6: 118-120 '62 (MIRA 17:1)

1. Laboratoriya infektsionnoy patologii (zav. - chlen-korrespondent AMN SSSR prof. A. Ya. Alymov) Instituta normal'noy i patologicheskoy fiziologii AMN SSSR.

PODDUBNYI, I.P.; CHEVAZHEVSKIY, A.P., redaktor; FEDOROV, B.M., redaktor;
KOLESNIKOVA, A.P., tekhnicheskij redaktor

[The DSP-2 log loader] Brevnopogrushatel' DSP-2 na pogruske lesa.
Moskva, Goslesbumisdat, 1954. 30 p. (MIRA 7:11)
(Limbering--Machinery)

ROOS, Lev Vladimirovich; ALYAB'YEV, Viktor Ivanovich; BOLDOV, Mikhail Yefimovich; ITINA, Liya Solomonovna; TSETLIN, Aleksandr Mikhaylovich; PATSIORA, P.P., redaktor; FEDOROV, B.M., redaktor; KARASIK, N.P., tekhnicheskii redaktor

[Centralized electric supply for lumber camps] TSentralizovannoe elektrosnabzhenie na lesozagotovkakh. Moskva, Goslesbumizdat, 1954. 104 p. (MLRA 8:5)
(Electricity in lumbering) (Lumber camps)

SERGEYEVA, A.S.; ZHEREBOV, L.P., professor; FEDOROV, B.M., redaktor;
KARASIK, N.P., tekhnicheskii redaktor

[The chemistry of wood and cellulose] Khimiia drevesiny i tselliu-
losy. Pod red. L.P.Zherebova. Moskva, Goslesbumisdat, 1954. 138 p.
(Wood--Chemistry) (MLRA 7:10)
(Cellulose)

BENDER, Matvey Mironovich; BURKOV, V.I., redaktor; FEDOROV, B.M., redaktor; VOLKHOVER, R.S., tekhnicheskiy redaktor.

[Safety engineering in the woodworking industry] Osnovy tekhniki bezopasnosti v derevoobrabatyvaiushchem proizvodstve. Moskva, Goslesbunizdat, 1954. 171 p. (MLRA 8:1)
(Woodwork--Safety measures)

DOLGOALEVA, Antonina Andreyevna; VEYS, Yu.D., redaktor; FEDOROV, B.M., redaktor; AGAPOV, F.F., tekhnicheskiy redaktor.

[Control method of sulfite cellulose production] Metody kontrolya sul'fittselliuloznogo proizvodstva. Moskva, Gosleskhimizdat, 1954. 179 p. (MIRA 8:4)
(Wood pulp industry)

ALLODOL, IS...
KOZLOV, Vasily Nikolayevich; NIMVITSKIY, Anatoliy Avgustich; SUMAROKOV,
V.P., redaktor; FEDOROV, B.M., redaktor; KHLYSOV, A.I., retsenzent;
SLAVYANSKIY, A.K., retsenzent; KARASIK, N.P., tekhnicheskii redaktor

[Technology of pyrogenic processing of wood] Tekhnologiya pirogene-
ticheskoi pererabotki drevesiny. Moskva, Gos.lesbumisdat, 1954.
619 p. (MLRA 8:11)

(Wood--Chemistry) (Pyrolysis)

BORONENKO, Z.V.; FNYGH, N.N., redaktor; FEDOROV, B.M., redaktor; KOLISHNIKOVA,
A.P., tekhnicheskii redaktor

[Progress in lumber drying techniques; proceedings of the third
All-Union Conference of Lumber Drying] Dostizhenia lesosushil'-
noi tekhniki; po materialam tret'ego vsesoiuznogo nauchno-tekhnicheskogo
soveshchaniia po sushke drevesiny. Moskva, Goslesbuzizdat,
1955. 112 p. (MIRA 9:3)

1. Nauchno-tekhnicheskoye obshchestvo lesnoy promyshlennosti.
(Lumber--Drying)

~~FEDOROV, B.M.~~

KHUKHRYANSKIY, Pavel Nikolayevich, doktor tekhnicheskikh nauk; SHUKLIN, A.V.,
redaktor; FEDOROV, B.M., redaktor; KARASIK, N.P., tekhnicheskii re-
daktor.

[The strength of wood] Prochnost' drevesiny. Moskva, Goslesbumizdat,
1955. 150 p. (MIRA 8:4)
(Wood testing)

STERLIN, David Moiseyevich; SERGOVSKIY, P.S., redaktor; FEDOROV, B.M.,
redaktor; KOLESNIKOVA, A.P., tekhnicheskiy redaktor

[Drying plywood in roller and chamber dryers] Sushka shpona v
rolikovykh i kamernykh sushilkakh. Moskva, Goslesbumizdat, 1955.
163 p. (MLRA 8:6)
(Flywood) (Drying apparatus)

SHEMYAKIN, Sergey Nikolayevich; MOVNIN, M.S., redaktor; FEDOROV, B.M.,
redaktor; KARSIK, N.P., tekhnicheskiy redaktor

[Intra-plant transportation in woodworking industries] Vnutri-
zavodskii transport derevo-obrabatyvalushchikh predpriatii
Izd.2-e, Moskva, Goslesbumizdat, 1955. 390 p. (MLRA 8:10)
(Woodworking industries)

SOKOLOV, Petr Vladimirovich, dotsent; PEYCH, N.N., retsentsent; TSITSURA,
N.M., retsentsent; SERGOVSKIY, P.S., redaktor; FEDOROV, B.M., redaktor;
KARASIK, N.P., tekhnicheskii redaktor.

[Drying lumber] Sushka drevesiny. Moskva, Goslesbunizdat, 1955. 422 p.
(Lumber--Drying) (MIRA 9:6)

SHURILIN, Viktor Semenovich; USANOV, P.A., redaktor; FEDOROV, B.M., redaktor;
KARASIK, N.P., tekhnicheskiy redaktor.

[Table for computing the volume of logs edged only on two parallel
sides] Tablitsy ob'emov neobreznykh pilomaterialov (brus'ev). Moskva,
Gosizdatstat, 1956. 381 p. (MLRA 9:5)
(Lumber--Mensuration)

ca

8

Deposits of complex cobalt ores in the Middle Urals
 H. M. Feklov, *Soviet Geol.* 1941, No. 2, 25-32. In the
 Ural deposits the Co/Ni ratio varies from 1.40 to 1.15,
 in the Kalinkbey and Anadol from 1.12 to 1.30; in the
 Urum and Rezhay 1.5. In the Alapay deposits the
 ratio Co/Ni averages 1.21. The best conc.
 sources of cobalt are the pyrite concentrates of magnetites
 and copper ores. V. H. Rathmann

ASH 51A METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED	INDEXED	SERIALIZED	FILED

PROCESSES AND PROPERTIES

1ST AND 2ND COLUMNS

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

101 AND 102 CODES

PROCESSES AND PROPERTIES INDEX

Ca

The naturally alloyed iron ores of the middle Ural... B. M. Fedorov, *Soviet Geol.* 1941, No. 8, (11) 11; *Chem. Zvest.* 1943, 1, 1924. —A geol. and mineralogical description of the alloyed Fe ores of the middle Ural, which contain rather large and widely varying amts. of Ni and Co. The possibility of extg. the Co and then working up the remaining ore to Ni steel is discussed. M. G. Moore

103-104 DETALLURGICAL LITERATURE CLASSIFICATION

105-106 MATERIALS INDEX

107-108 ALLOY INDEX

109-110 111 AND 112 CODES

113-114 115 AND 116 CODES

PROCESSES AND PROPERTIES INDEX

CA

Mesozoic placers of the Uchalin region in the Southern Ural. B. M. Fedorov. *Russkaya Nauka* 13, No. 1, 8-11/ (1947). — A discussion of the geology of the gold placers of this region. M. Hosen

B

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNOPTIC	FROM SYNOPTIC
FROM SYNOPTIC	FROM SYNOPTIC

PROCESS AND PROPERTIES INDEX

8

Relation between the arsenic and phosphorus contents of iron ores and the conditions of their formation. H. M. Fokuyev. *Razvedka* Vol. 13, No. 4, 5-14 (1947).—The concn of As and P in sedimentary Fe ores depends on the source of the ore-bearing solns. and on the O conditions of the medium where deposition occurred. Three such media are distinguished: oxalic (rich in O), siliceous, and carbonate (poor in O). The concn. of As and P is highest in a siliceous environment of both marine and lacustrine origin. The P content in siliceous ores varies within narrow limits, in an oxalic environment there is considerably less of it and the concn. varies greatly, and there is very little of it in carbonate media. There is little As in oxalic and still less in carbonate environment. Similar conditions prevail in hydrothermally formed deposits. There is less P and As in endogenic than in exogenic deposits. In contact metamorphic deposits the P content is very spotty. In deposits formed by oxidation, the P and As content depends on the source of ore-bearing solns. as well as on the alloying and other admixts. On the Vernadskii index (a value obtained by dividing the av. concn. of a given element in a deposit over its concn. in the earth's crust; values greater than 1 are referred to as concn. and are considered pos.; fractional values are referred to as depletion and are considered

the vol. diss. to 100 ml., and, after heating to 60°, H₂S is bubbled to ppt. the Sb as sulfide. The ppt. is washed 2 or 3 times to remove Fe, then washed into a beaker and an equal vol. of concd. HCl added. After boiling to dissolve the sulfide and remove the H₂S, a little H₂O is added and the soln. is made alk. to phenolphthalein by adding a 2% soln. of NaOH, then made slightly acid with HCl and finally made alk. with NaHCO₃ soln. No other alkali must be present now, as they form interfering hypochlorates. Sb₂Cl₆ is oxidized to SbCl₅ by standard I soln. made up of 10.12 g. I to 1 l. distd. H₂O. A ml. of this soln. on 0.5 g. of ore is equal to 10% Sb. Starch is used as the indicator. In dealing with shipment concentrates the ore is dissolved in strong HCl, dissd., neutralized, and titrated directly without previous pptn. with H₂S. In the mill the ore is screened, washed, sorted, jaw crushed, screened again, crushed in a Kennedy springhead crusher, and milled in 2 ball mills, each in closed circuit with its own classifier. Au is recovered by straking, jigging, and flotation. To recover Sb, pulp at 1:1 liquid-solid ratio is conditioned with vanthate promoter and pine oil frother for 10 min. then passed through flotation cells where the control is largely visual. For high-grade concentrate, froth should be dense and matted; for high recovery, it should be fairly loose. The final Sb concentrate is pumped to a James table for dressing, sepg. some pyrite and arsenopyrite. The concentrate then flows to 4 collecting pumps. Of the Sb in the ore, 97% is recovered as cobled ore and 71% as concentrate contg. 60-65% Sb.

C. W. Schuck

METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

FEDOROV, B. M.

PA-2T19

USSR/Geology

Jan-Feb 1947

"Scattered Mesozoic Elements in the Uchalinsk Area
of the Southern Urals," B M Fedorov, 4 pp

"Razvedka Nedr" Vol 30, No 1

Discusses mesozoic formations, tertiary deposits,
quaternary formations.

2T19

1st and 2nd orders PROCESS AND PROPERTIES INDEX 100 and 210 copies

FEDOROV, B

116

Variations in the color index of blood as a result of malignant tumors. O. Moskvin and B. Fedorov. *Bull. Biol. med. exp. U. S. S. R.* 7, 6-9(1939) (in English).
 The color index (I) of the blood of normal rats corresponds to pH 6.2-6.3, that of white mice to 5.5-5.8. The blood of rats 1-1.5 months after inoculation with Krichevskii-Mil'kov sarcoma and with Pleasner-Jobling carcinoma shows I corresponding to 5.6-6.3 and 5.0-6.3, resp. The I of the blood of white mice 1 month after inoculation with the Ehrlich adenocarcinoma corresponds to 5.2-5.5. In the case of malignant tumors the blood of the animals shows a marked capacity for absorbing methylene blue.

B. A. Karjala

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED SERIALIZED INDEXED

FEDOROV, B. M.

FEDOROV, B. M. - "Effect of Certain Irritations of the Nervous System on the Processes of Regeneration of the Mucous Membrane of the Stomach." Sub 3 Jun 52, Acad Med Sci USSR. (Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

СЕРГЕЕВ, И. И.

"Conditioned Reflex Mechanisms of Changes in the Reactivity of the Organism
upon Repeated Intravenous Introduction of Strophantin," p. 235

Problema Reaktivnosti v Patologii, Medgiz, Moscow 1954, 344pp.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.
CHERNYKH, A.M.; FEDOROV, B.M.

Disease and recovery according to I.P.Pavlov's teachings. Vest.
AMN SSSR no.3:47-50 '54. (MIRA 7:11)

(DISEASE,
Pavlovian theory)
(NERVOUS SYSTEM, pathology,
nervovism)